

Water Resources Department

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April 12, 2017

MEMORANDUM

TO:

Senator Lew Frederick, Co-Chair

Representative Brad Witt, Co-Chair

Joint Ways and Means Subcommittee on Natural Resources

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Matt Stayner, Legislative Analyst

Legislative Fiscal Office

FROM:

Thomas M. Byler, Director

SUBJECT:

Follow-up Information on High Hazard Dams

Yesterday, during the public hearing on Senate Bill 5542, the Committee requested a map showing the high hazard dams throughout the state.

Dams Subject to the State's Dam Safety Program – Dams at least 10 feet high and storing at least 3 million gallons (9.2 acre-feet of water) are subject to Oregon's Dam Safety Program, administered by the Water Resources Department. The largest dams in the state, however, are

regulated by federal agencies. Oregon's Dam Safety Program is the lead public authority responsible for the safety inspection of 969 non-federal dams that meet the size requirement referenced above.

Hazard Ratings – Like most states,
Oregon rates dams by hazard. A dam's
hazard rating is based on what could
happen downstream if the dam fails, rather
than on the physical condition of a dam. A
high hazard dam, for example, means that
failure would likely cause fatalities. There
are currently 75 non-federal dams rated as
high hazard. These dams are inspected
annually by the Water Resources
Department. See the accompanying table
for hazard classifications for dams.

Hazard Classifications for Dams

75 High Hazard Dams

Failure will likely cause fatalities. These dams are inspected annually.

147 Significant Hazard Dams

Failure will damage properties but loss of life is unlikely. These dams are inspected every 2 to 3 years.

747 Low Hazard Dams

Failure is unlikely to cause major property damage or loss of life. These dams are inspected every 5 to 6 years.

969 Total Dams in the Program

Source: OWRD, March 31, 2017

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Condition of Dams – The original focus of the Department's Dam Safety Program was the review and approval of designs for new dams. A majority of Oregon's dams were constructed decades ago, with some more than 100 years old. As a result, the dam safety program now focuses on evaluating the <u>condition</u> of existing dams through regular inspections and providing feedback to owners regarding needed safety improvements.

As of April 2017, about half (36) of high hazard dams are in satisfactory condition. About one-fourth of them (18) are in fair condition. Fifteen (15) are in poor and six (6) are in unsatisfactory condition. The condition analysis of each high hazard dam is updated after its formal inspection. Inspections are expedited for dams in poor and unsatisfactory condition as necessary, and if there is evidence these dams are unsafe and the owner is not acting to correct the deficiency, the owner is informed that a hearing will be held to begin an enforcement process under ORS 540.350 through 390.

This map reflects the current condition rating of state-regulated high hazard dams as of April 12, 2017. Condition ratings are re-evaluated during each dam inspection and are subject to change.

